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# RELATIVE REMOTE RURAL AREAS (RRRA) IN DEVELOPED REGIONS: AN ANALYSIS OF THE EMILIA-ROMAGNA REGION TO SUPPORT POLICY DECISION MAKING

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**Abstract:** This paper addresses the identification and the analysis of the remote rural areas (RRA) that should be at the center of future regional development policies for periphery areas in averagely highly developed territories, such as the Emilia-Romagna region. However, since none of the areas of the region can be defined lagging or underdeveloped when compared with the EU 25 countries, it is introduced the concept of "Relative" Remote Rural Area (RRRA) which partially could recall the semi-periphery in the theoretical scheme of Immanuel Wallestrein or the trasition area of Friedmann.
Methodologically, the investigation is done both by using as a basis an intermediate geographical level that can be considered in line with the NUTS4 one: the SLL (Local Working Systems) identified by the Italian Institute of Statistics (ISTAT), and by a NUTS5-level cluster analysis performed using a selection of indicators, which includes demographic, socio-economic, employment, agricultural, infrastructure and commuting patterns. This work led to the identification and mapping of a set of municipalities that show the higher remote & rural features of the region. The Province of Ferrara resulted the NUTS3 level with the highest RRRA. After a discussion upon the main characteristics of this areas, preliminary policy indications for these territories are given.

**Keywords:** remotness, rurality, local working system (SLL), geographical economic analysis, regional policy

**JEL classification:** C30, C88, R12, R14, R58

**Content:**

## 1. Introduction

Europe, especially after the widening process to the central-eastern countries, offers a vast variety of case studies of *remote rural areas (RRA)*[1]. Therefore, the concepts of rurality and marginality take on different forms according to the territory of reference.

However, the definition of "rurality" is not so clear-cut; the review of a wide literature shows that the concept is changing in different periods relatively the rural territory function. Rurality has been conceived mainly agrarian (1950s-60s), industrial (1960s-90s) and post-industrial rurality (from 1990s) (Sotte,1997, 2005). In addition, Murdoch & Pratt (2002) redefine the concept in a contest of post-rural.

Furthermore, we can relate to three main meanings of rural and rurality: one where rural denotes a real object, or variously describes some quality of landscape or preponderance of social and economic practices. In this way the term rurality is usually deployed in attempts to classify or compare different landscapes, or different social and economic practices. It is in this sense that an 'index of rurality' has been used (Cloke, 1987). The second meaning it is about a 'cultural' interpretation of the rurality where the terms rurality is a cover-all notion for some qualitative measure of the 'naturalness' of the landscape or social and economic practices.

It is against these two main positions that a third one has been developing in recent years inspired by poststructuralist debates. Such a position takes the radical step of rejecting the notion of a point of origin; the suggestion is the existence of a plurality: in short, there are many 'rurals'. There has been some considerable debate about this plurality, especially with respect to the issue of power (see Philo, 1992; 1993; Murdoch and Pratt, 1993; 1994).

If the concept is referred to a territory, in a more concrete contest, rural can be linked to an agricultural (sector of productivity), a demographic (as depopulated) or a backward meaning and any of these meaning stands out from the other (Pacciani, 2003). In addition, rural and rurality can be conceived as concepts or subjects of discussion as well as territorial contests that remind us to a weakly situation because of changes that, just now have ignored or destroyed these realities.

Recent interests on environment, social inequality , rural cultural heritage, different kind of tourism and the industrial model crisis have highlighted the need to reflect upon the rural territories.

In the European Union (EU), since the reform of the Common Agricultural Policy (CAP), Rural Development is playing an increasingly important role in helping rural areas to meet the economic, social and environmental challenges of the 21st century. Rural areas make up 90 percent of the territory of the enlarged EU and the new legal framework points more clearly to the direction of boosting growth and creating jobs in rural areas – in line with the Lisbon Strategy – and improving sustainability - in line with the Göteborg sustainability goals.

The future Rural Development policy 2007-2013 will focus on three areas in line with the three thematic axes laid down in the new rural development regulation:

- Improving competitiveness for farming and forestry;
- Environment and countryside;
- Improving quality of life and diversification of the rural economy.

In addition, a fourth one, called "Leader axis", introduces possibilities for locally based bottom-up approaches to rural development.

[1] Significant examples are described by Bednarikova *et al.* (2006).

The new programming period provides a unique opportunity to refocus support from the new rural development fund on growth, jobs and sustainability. Therefore, with the introduction of the second pillar of the CAP, a new paradigm of multi-dimensional rural development has emerged in Europe. Rural development is no longer the ‘‘monopoly of the farmers’’. In particular, in the CAP II initiative, also known as the rural development regulation, some keywords and phrases appear that seem to indicate that thinking on rural development in the EU is more in line with the approach that has been taken for quite a long time in development studies in the Southern countries (Korf and Oughton, 2006): e.g. “emphasis must be on participation and a ‘bottom up’ approach”.

However, although the rural development regulation talks about rural development in a broad sense virtually, all the measures mentioned are directed at farming and encouraging restructuring and diversification.

Finally, in addition to the concept of rurality, the focus area of the paper is include the remoteness concept should also be connected to territorial factors such as distances from core and urban centres and a relatively high dispersion of economic activity as well as a certain marginality and weakness in the economic performance. Referring to the EU policy it is thus relevant to mention a significant territorialisation methodology used to define the typologies of regions according to the European Structural Funds and Cohesion Policy Programmes (Council of Europe, 2006; Pasini, 2006).

This study is based on the territorial identification of remote rural areas (RRA) in the European Union following the methodological guidelines developed in the framework of the TERA research project; however, theoretically it recalls also the concepts of rural districts and local rural systems that the literature had widely discussed (Brusco, 1982; Cannata, 1989; Cecchi, 1992, 1999, 200; Romano, 2000).

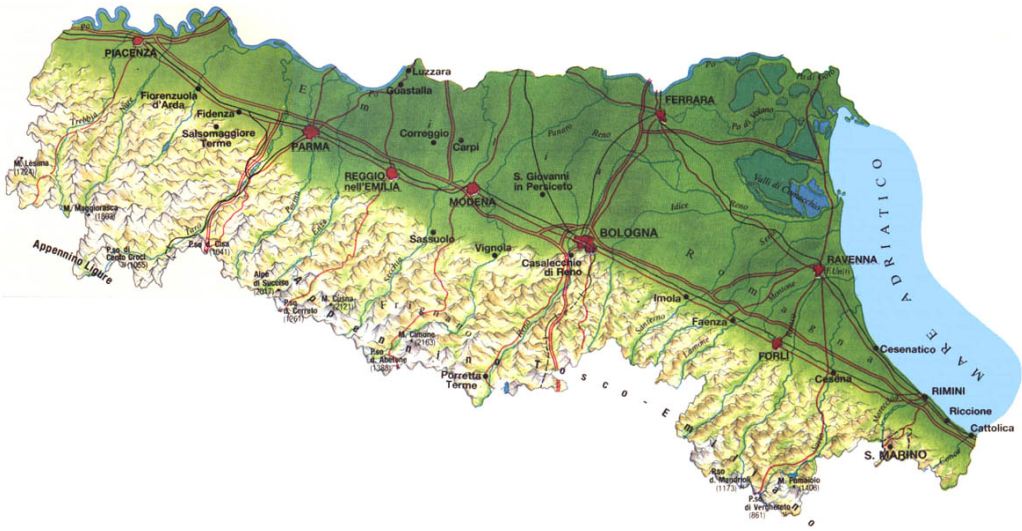
Concerning the Italian experience, it is important to underline that the Emilia-Romagna Region is characterized by a sustained economic welfare and an appreciable social stability following a model of a balanced and original development.

Since the 1950s the development process of the regional economy has been based on small and medium handicraft enterprises and on a forefront agriculture oriented to the European agro-food market. In the 1970s there was an intense and unexpected acceleration of the economy which, from a peripheral position, has pushed the Emilia-Romagna region towards a development level comparable with the rich Italian North-west and so that now it is to be among the richest areas of the European Union. This can be explained by a diffuse process of localisation and productive polarization in the rural areas, often indicated as the industrial district phenomena (Beccattini, 1987).

This innovative orientation of the rural world has been confirmed at the European level with Agenda 2000 where the EU has ratified the new functions that agriculture can develop in the modern society and for which the society is minded to pay: care on aliments quality, health's protection, environmental sustainability, integration between productive activity and land conservation. In this way also the marginality takes on a particular connotation, as a tool to reach a wider equilibrium where the marginal areas become the warder of patrimonies, important for the whole territory (Zabbini, 2000).

This paper addresses the identification and the analysis of the remote rural areas (RRA) in the Emilia-Romagna Region and discuss the relativeness in the EU context, leading to the introduction of the Relative Remote Rural Area. Chapter 2 of this paper present two approach for territorial identification: a GIS expert analysis based on a NUTS4 equivalent units (the Local Work Systems – SLL) and a cluster analysis based on NUTS5 level using the methodologies guidelines developed in the framework of TERA research project. Finally a discussion on policy approach is done.

**Fig. 1 – General Map of the Emilia-Romagna Region**




## 2) The Relative Remote Rural Area territorial identification

### *2.1 The choice of the Local Working Systems (SLL)*

Within the TERA project the local research units were required to define the marginal areas on the basis of a coherent territorial comparison for all the partners, and the NUTS 4 is thought of as the more effective geographical scale (the dimensional-optimum). This choice give to the Italian team a problem of homogeneity in order to be aligned with the other research units of the project. In particular, Italy has not formally recognized this level of administrative division, but just the NUTS3 – i.e. Provinces - and the NUTS5 level represented by the Municipalities. To consider the first one would create a lost of a precious information as Provinces are a too large territorial context to conduct meaningful investigations, whilst the second ones, NUTS5, could provide an excess in the fractionalisation in the analysis, but even more in those steps of the TERA research linked to policy proposals. Thus, it is important to define meaningful municipality aggregations that are also significant for the activation of European policies focusing on rural and remote rural areas.

The proposal of the authors is the use of the Local Working Systems (*Sistemi Locali di Lavoro, SLL*) as these represent the places of the daily life of the population that there resides and works. They are territorial units made by several aggregated municipalities, geographically and statistically comparable. The SLLs are a very useful tool of analysis for investigating the social and economic structure of the Country in a territorial perspective. The study that has brought to the definition of the SLL in 2001 is the result of a joint research project between ISTAT and the Department of Economics of the University of Parma. This project follows a line of scientific and methodological continuity with previous experiences that ISTAT had in 1981 and in 1991 in collaboration

with the IRPET and the Universities of Newcastle upon Tyne and of Leeds. This approach and the regionalisation algorithm is based to the Travel-To-Work Area (TTWA) methodology developed by the University of Newcastle scholars in the 1980s and adapted by Sforzi *et al*. to the Italian case (ISTAT, 1997).

In particular, the SLLs are aggregations of Municipalities which derive from the elaboration of the data related to the commuting attitudes of the family-members for job reasons, and collected via the General Census of the Population. The objective is the construction of a territorial grid determined by the movements of people for job reasons. In this way elementary administrative unities (Municipalities) are aggregated on the territory following social and economic relationships. The criteria adopted for the definition of the SLLs are the followings:

- Self-containment
- Spatial Continuity
- Space-to-time Relationship.

The term "Self-containment" indicates a territory where productive activities and services are concentrated in a sufficient quantity in order to offer job opportunity to the greatest part of the population resident in that proper area. It is the capability of a territory to contain the greatest part of the human relationships that occur between the centres of production activity (place of work) and the activity related to the social reproduction (i.e. place of residence, education, culture, health, leisure, etc.). A territory with these characteristics is a local system, a social and economic entity that summarizes occupation, acquisitions, relationships and social opportunity; the activities are, however, limited in time and space, accessible under the tie of their location and their duration, up to the available transport technologies, given an individual residential basis and the necessity to come back at the end of the day, in classical term referred as commuting patterns.

"Spatial Contiguity" means that the municipalities contained in the SLL must be adjacent. The "Space-to-time Relationship" is intended to indicate the distance and the time of route between the place of residence and the place of job. This is referred to the time-distance concept that actually is quite relative and it is deeply connected to the availability of efficient services.

The boundary of the SLL crosses the administrative edges of provinces and regions. The only administrative limit safeguarded by the definition procedure of the Local Systems is that of the municipalities, because it represents the elementary unit for the data survey. Yet, at the whole national level, 167 are the SLLs composed of municipalities belonging to more than one province.

SLLs seem therefore to be adequate to be used in this regionalisation process because they implicate spontaneous mechanisms of social, economic, and political homogeneity of the areas and they contain information for the development possibilities of the most marginal areas and are, finally, they are clearly an intermediate area between NUTS 3 and NUTS 5 that can be a relatively be a *proxi* of a NUTS 4. In addition, SLL include conceptually a partial content of marginality and remoteness as SLL are, by construction, related on the concept of distance.

**Fig. 2 – Map of the 2001 Italian Work Local System (SSL) (ISTAT, 2005)**

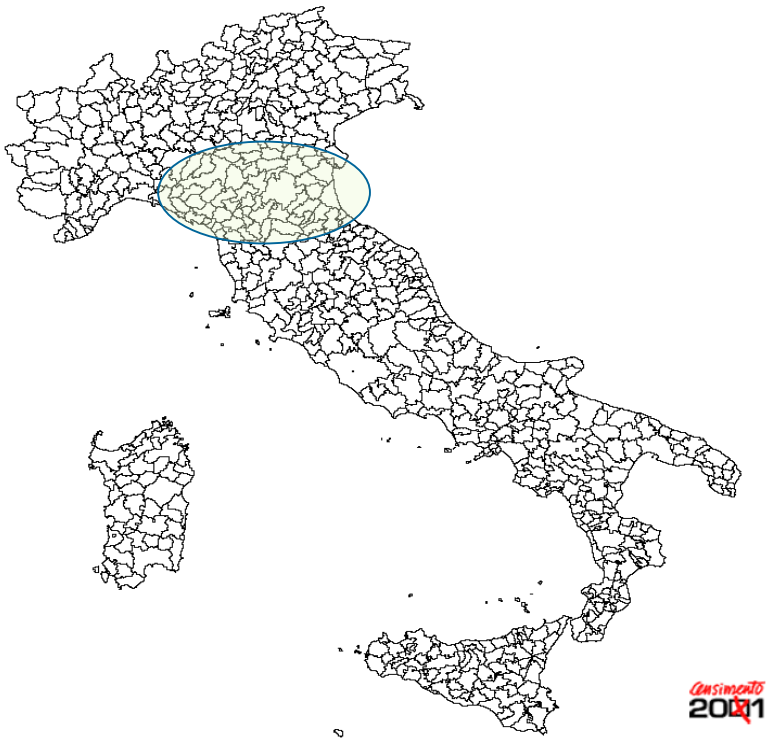
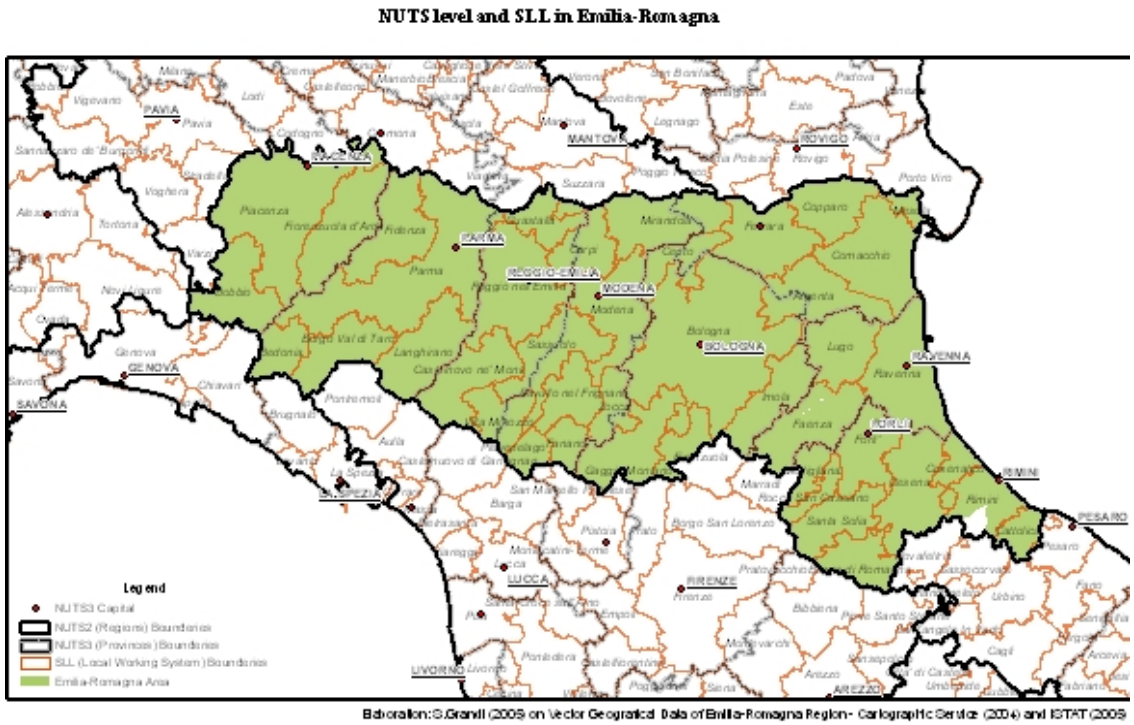


**Fig. 3 – Map of the Administrative levels and Work Local System (SLL) in the Emilia-Romagna Region**



SLLs size vary depending by the number of inhabitants and by the form and density of their daily commuting patterns. In fact, near to small municipalities that are part of a wider intercity network, and which can be considered as peripheral elements of a Local System of greater dimension; there are, also, other small municipalities that constitute, together with others of similar demographic level, an independent Local System. The demographic dimension is therefore connected to the economic nature of the Local Systems. Thus, by analyzing this dimension it is possible to understand if the SLL is a marginal reality, in a demographic decline, or a small dynamic industrial concentration, in economic and demographic expansion.

SLLs also vary according to the number of employees in the local unit of the enterprises and institutions. The number of employed people depends obviously on the class of demographic broadness, but also on the age structure of the population.

The territorial structure of the SLLs changes through time reflecting the changes in the social territorial organization and in the overall economic conditions. In 2001, the Italian SLLs were 686, whilst they were 784 in 1991 and in 955 in 1981. However, the decrease was not uniform across the country. While in some areas of Italy they have been decreasing, in others they were increasing. The latter phenomenon is connected to the economic growth of some municipalities that become detached from the SLL to which they used to belong in the past. Whilst the great number of SLL in the past was a consequence of the fragmentation of the residential and productive installations, today the formation of new SLLs depends on the birth (or consolidation) of new productive - mainly industrial – realities as well as the great role of the progress in transportation technologies and infrastructures that have reduced some time-distance. Therefore, this concentration and reduction in time-distance phenomenon is also confirmed in our Region where the SLLs passed from 48 in 1991 to 41 in 2001.

**Table 1 – SLL Variation of the Emilia-Romagna Region in (1991-2001) (ISTAT, 1997 and ISTAT, 2005)**

| Region and/or Geographical Unit | Number of SLL | | Difference between 1991 and 2001 | 2001 % | 1991 % | Variation |
|---|---|---|---|---|---|---|
| | 2001 | 1991 | | | | |
| Emilia-Romagna | 41 | 48 | -7 | 6,0 | 6,1 | -14,6 |

**Fig. 1 – Resident population density in each SLL (Source: ISTAT, 2005 based on 2001 census data)**

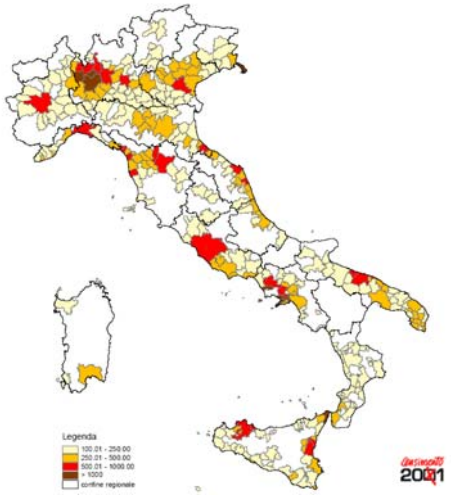



**Fig. 2 – Seniority Index in each SSL (Source: ISTAT, 2005 based on 2001 census data)**

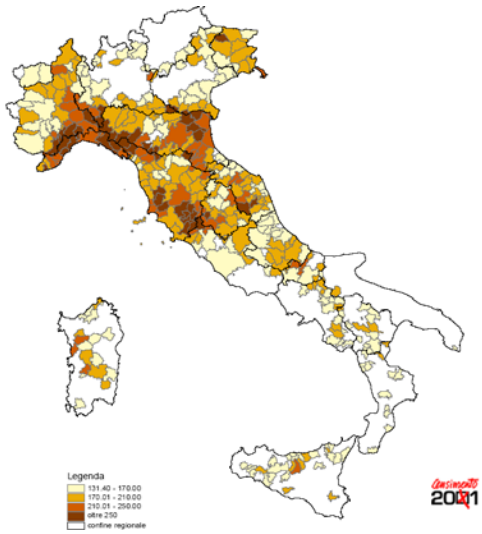



**Fig. 3 – Territorial Concentration of foreign resident in each SLL (Source: ISTAT, 2005 based on 2001 census data)**

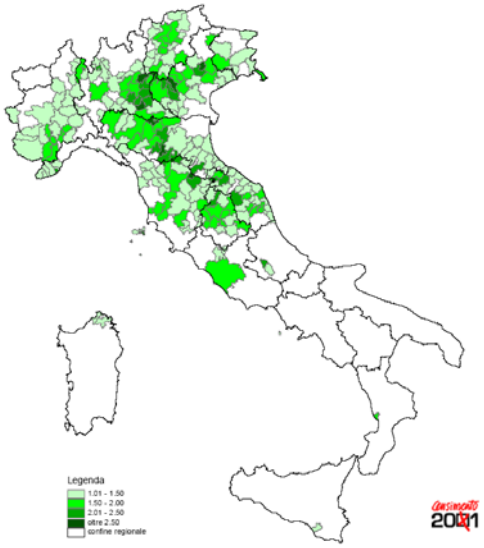
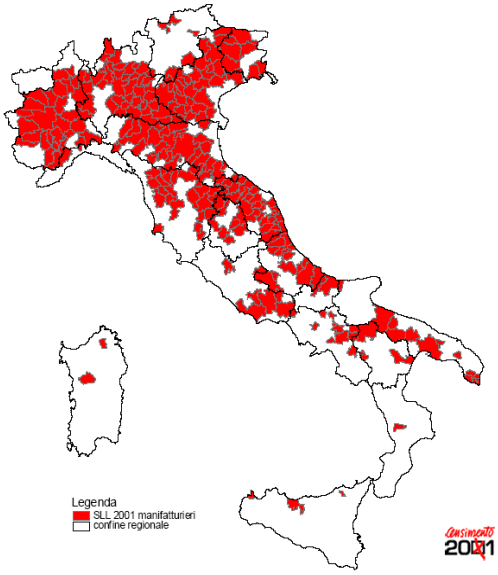



**Fig. 4 – Manufacturing work local Systems (Source: ISTAT, 2005 based on 2001 census data)**



*2.2 Territorial Identification: a GIS expert spatial analysis based on the Local Working Systems*

By observing the characteristics of the SLLs which are present in our Region it is possible to distinguish between strong SLLs and weak ones: an expert spatial-analysis of thematic layers has lead to focus on two different marginal areas[2]:

- The Piacenza Mountainous Area and
- The Po Plain Area, where two different NUTS3 areas are located, i.e. the provinces of Ferrara and Ravenna[3].

The analysis of the housing density clearly underlines a marginality of these two areas in comparison with the regional average, where the inhabited area is concentrated on the pied-mountains line in correspondence with the historical road axle of the Emilia-way, i.e. corresponding to what can be called the metropolitan line. Both the Province of Piacenza, nearer to the industrial triangle, and Ferrara (city of reference for the Po Plain area) have had the greatest population contraction in the Region, being impoverished by the emigration. Even though the regional demographic structure is fairly stable in the Region, it has sensitively modified through time its distribution on the territory "marginalizing" some areas. This behaviour is confirmed by other indicators too: the seniority index (the highest), the balance of the population in the census interval (1991-2001) (the most negative), the rate of unemployment per 100 actives (high), the manufacturing systems of work (absents), the mobility (the weakest both in entrance and in exit), the scant presence of graduates over 24 years as well as the high percentage of non-employed residences, and an high presence of houses not used for usual residence (i.e. vacation houses).

The cartographic representations reported clearly show the two marginal areas in the regional context. This marginality, however, has some deeply marked differences due to the geographical and historical conditions that ask for an accurate qualitative analysis, especially in view of a choice for policy making as it will be discussed in a further paper.

The expert spatial analysis indicates the Po Plain Delta area more appropriate as Relative Remote Rural Area (RRRA) because of two main reasons: it present a more accentuated dispersion in population and settlements and an overall depressed economic situation, particularly as far as mobility and income is concerned.

In particular, the RRRA are identified in those SLLs and municipalities which mainly belong to the Province of Ferrara (i.e. Comacchio, made by 7 municipalities, Copparo, 6 municipalities, Ferrara, 10 municipalities, Mesola, 2 municipalities and Ravenna, 3 municipalities).

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[2] For a quantitative analytical description of the 41 Emilia-Romagna's SLLs, see the matrix reported in Annex I as well as the cluster analysis (Annex II). From the same matrix also the relative remoteness of the selected area comes out clearly.

3 A special note has to be done about Ravenna. Despite the indicators tend to show clearly the lack of strong disadvantages linked to the concepts of remoteness and rurality, it seems useful to keep this centre in mind. Yet, Ravenna could be interesting for the Po plain area in so far as it is experimenting a transient phase passing from an economy based on agro and chemical industry to a tertiarization. Ravenna could thus represent an urban pole outside the main area.

**Fig. 5 – Resident population density in each SLL (Source: ISTAT, 2005 based on 2001 census data)**

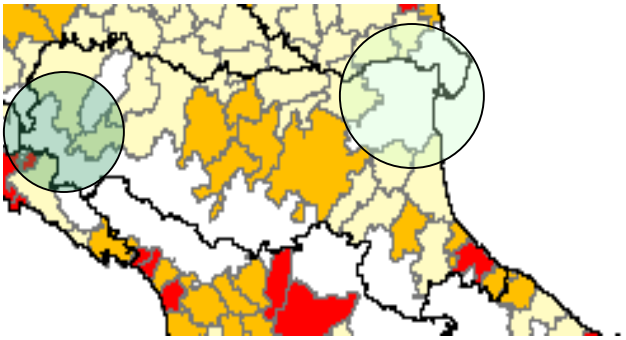


**Fig. 6 – Seniority Index in each SSL (Source: ISTAT, 2005 based on 2001 census data)**

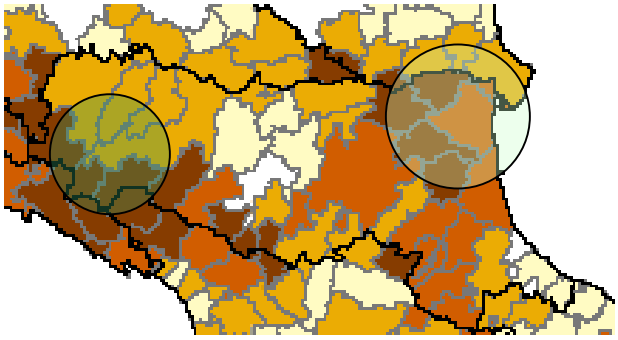


**Fig. 7 – Territorial Concentration of foreign resident (Source: ISTAT, 2005 based on 2001 census data)**

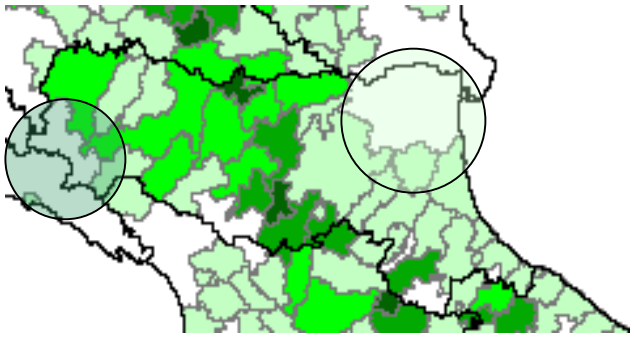


**Fig. 8 – Manufacturing work local Systems (Source: ISTAT, 2005 based on 2001 census data)**

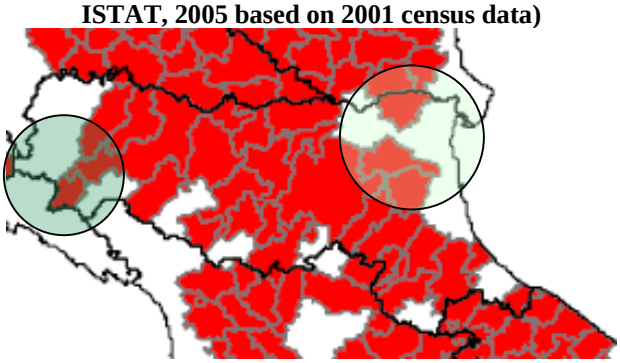


**Fig. 9 - Total population balance between 1991-2001 at Municipality Level (NUT5) (Source: Istat, 2001)**

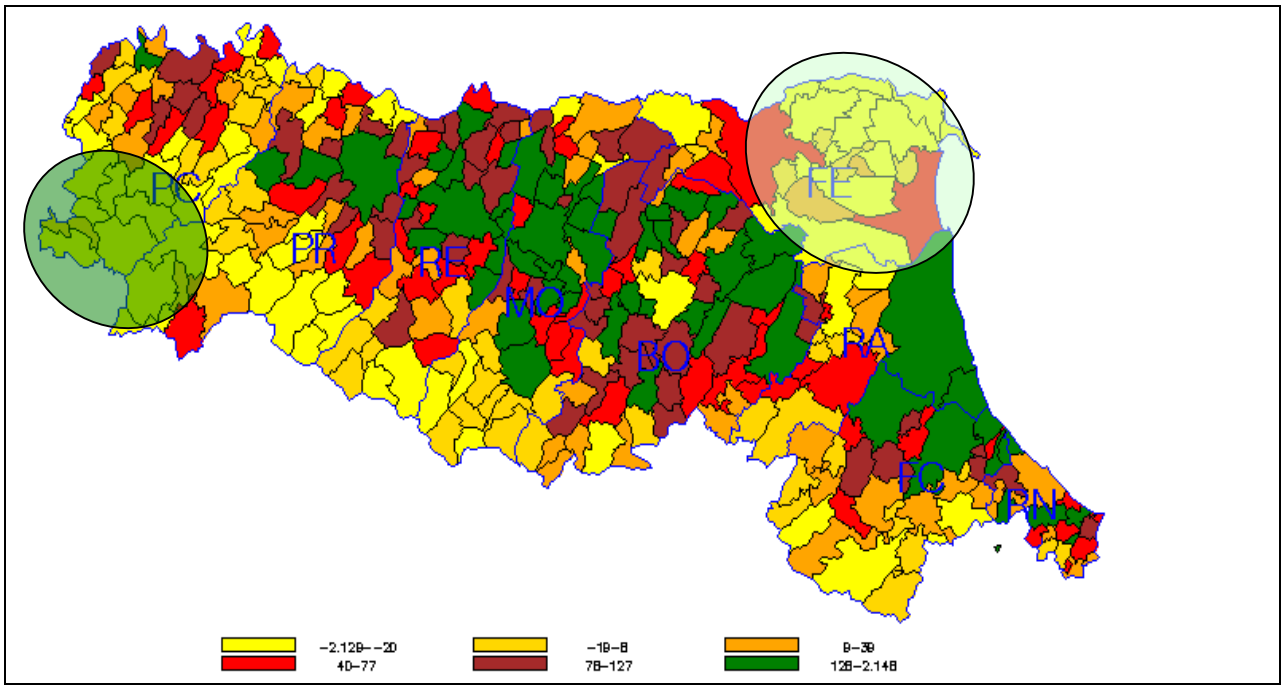



**Fig. 10 - Unemployment rate at Municipality Level**

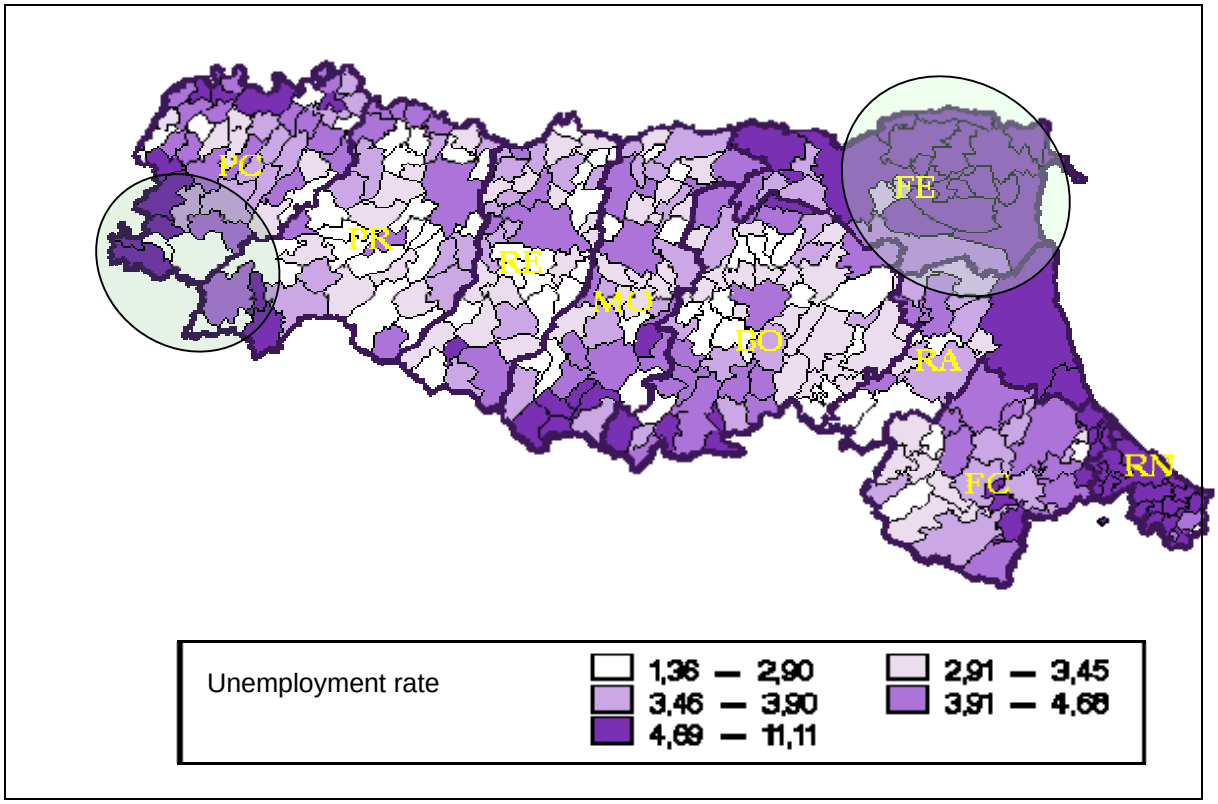


**Fig. 11 – Commuting at Municipality Level: Arrivals °/oo (Source: Istat, 2001)**

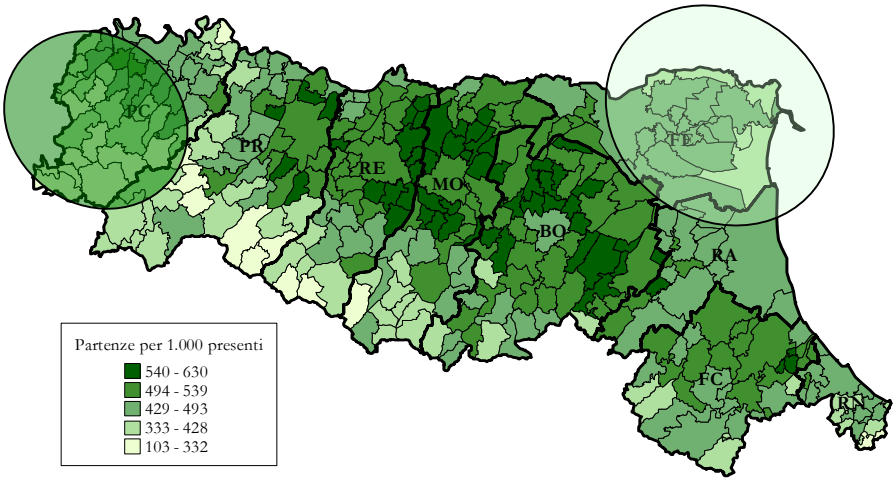



**Fig. 12 – Commuting at Municipality Level: Departs °/oo (Source: Istat, 2001)**

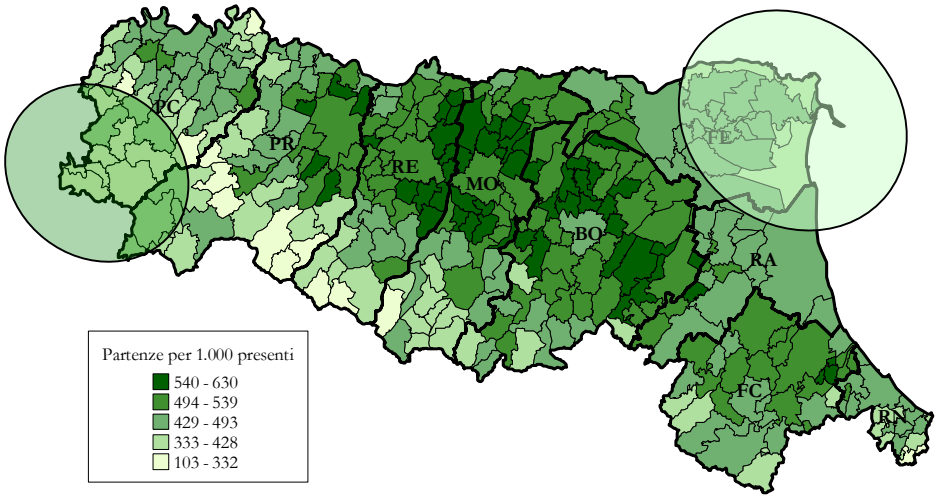


**Fig. 13 – Percentage of graduates more than 24 years old (source: ISTAT, 2001)**

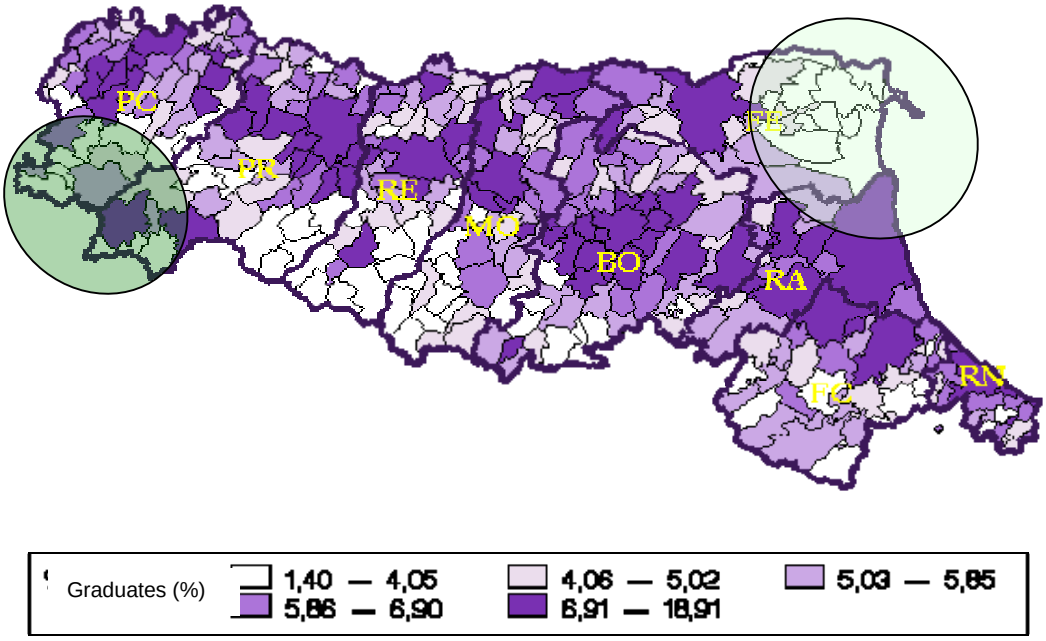
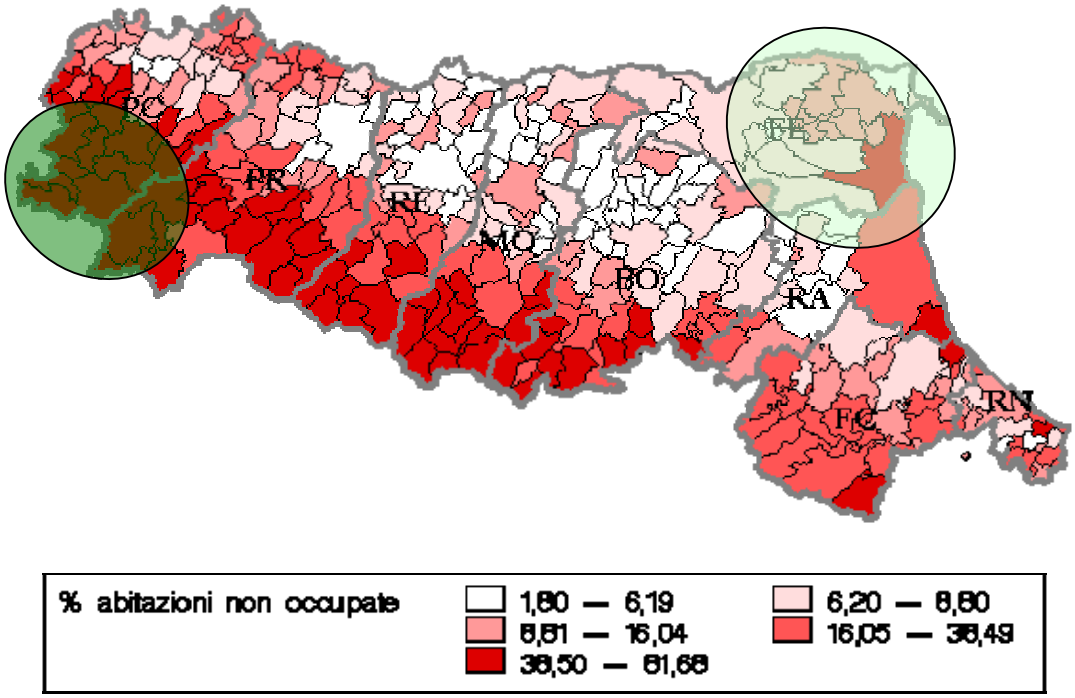



**Fig. 14 - Percentage of empty residential houses (source: ISTAT, 2001)**



*2.3 Territorial Identification: a cluster analysis based on the NUTS5*

In addition to the expert spatial analysis done at SLL level, a cluster analysis has been performed at NUTS5 level, i.e. considering all the 341 Municipality of the Region. Following the TERA suggested methodology (Bednarikova et al., 2005) and the statistical methodologies 20 indicators have been selected and their average are listed in Annex II (Table 6), whilst other indicators have been considered in term of descriptive ones.

The cluster analysis identifies four classes of Municipalities grouping relatively homogeneous characters: "Industrial Belt" , "Rural Area", "Metropolitan Line" and "Mountain Rural Area" that are shortly described in the following table.

**Table 2 – Description of the main characters of the identified clusters**

| | |
|---|---|
| Cluster 1 – "Industrial Belt" | Composed of the most dynamic Municipalities. These present a low rate of utilized agricultural area (UAA), a high commuting, a positive population balance, a low seniority index, a low unemployment rate, a high level of industrial employment and a low dependency index. In general, therefore, despite the location of these territories are in what generically could be defined a rural areas |
| Cluster 2 – "Rural Area" | Composed of less dynamic non urban Municipalities. These present a less intense roads network, the lowest Local Units per inhabitants rate. As for the demographic indicators in this cluster there are a low number of inhabitants, a fairly low population balance with a rather high seniority index. The available income per capita in these Municipalities is averagely the lowest of the whole Region as well as the unemployment rate has relatively high values. Its average is 4.30 % just lower the main urban centres (see cluster 3) where this phenomenon is expected due to the rule of the large quantities. |
| Cluster 3 – "Metropolitan Line" | Composed of the largest urban centres (corresponding to the capital of the Provinces). These present a high number of inhabitants due to the large concentration of population in the urban area, therefore there is a high density of population and a relatively high seniority index. In addition, in these areas there is a high per capita disposable income, a low agricultural employment and a high unemployment rate. The house occupancy rate is high, thus there is a low number vacant house. Daily outward commuting is not very high due to the fact that most of the activities are done within the area itself, whilst the these centres are attractive of neighbouring Municipality labour. |
| Cluster 4 – "Mountain rural area" | Composed of the Municipalities located in the mountain area in the Apennines. As for demographic indicators, these areas present a low number of inhabitants in absolute term, as well as density of population and a negative population balance, linked with very high seniority and dependency indexes. Per capita disposable income is relatively high in average, as well as unemployment and local unit/inhabitant does not show significantly negative values. Low commuting patterns is an additional indication of the relatively "close" economic system. The presence of a lot of vacant houses witnesses the use of the territory as a leisure area. |

As for the descriptive indicators an analysis of ISTAT data have been done to complete the cluster analysis. It can be said that from it does not seem meaningful to highlight rural remoteness through the female presence or the rate of female unemployment as the Emilia-Romagna is one of the Italian regions where the women's involvement in the working and social life is high. Over 42% of women (between 15 and 64 years) is employed *versus* the 31% as the national average.

On the contrary, considering indicators as the percentage of protected areas and the concept of accessibility of the NUTS 5 territories is more significant. The latter can be assessable with indicators such as the distance from the main centre, the communication infrastructures of the area (No. of Km. of roads per square Km. in the area, No of Km of freeway, No. of bus stops of extra urban lines, and No. of railway stations). To this purpose data reported in Annex I (table 3) was used. For example, Mesola results the most distant Municipality from the Province' centre (82 km) in the Region.

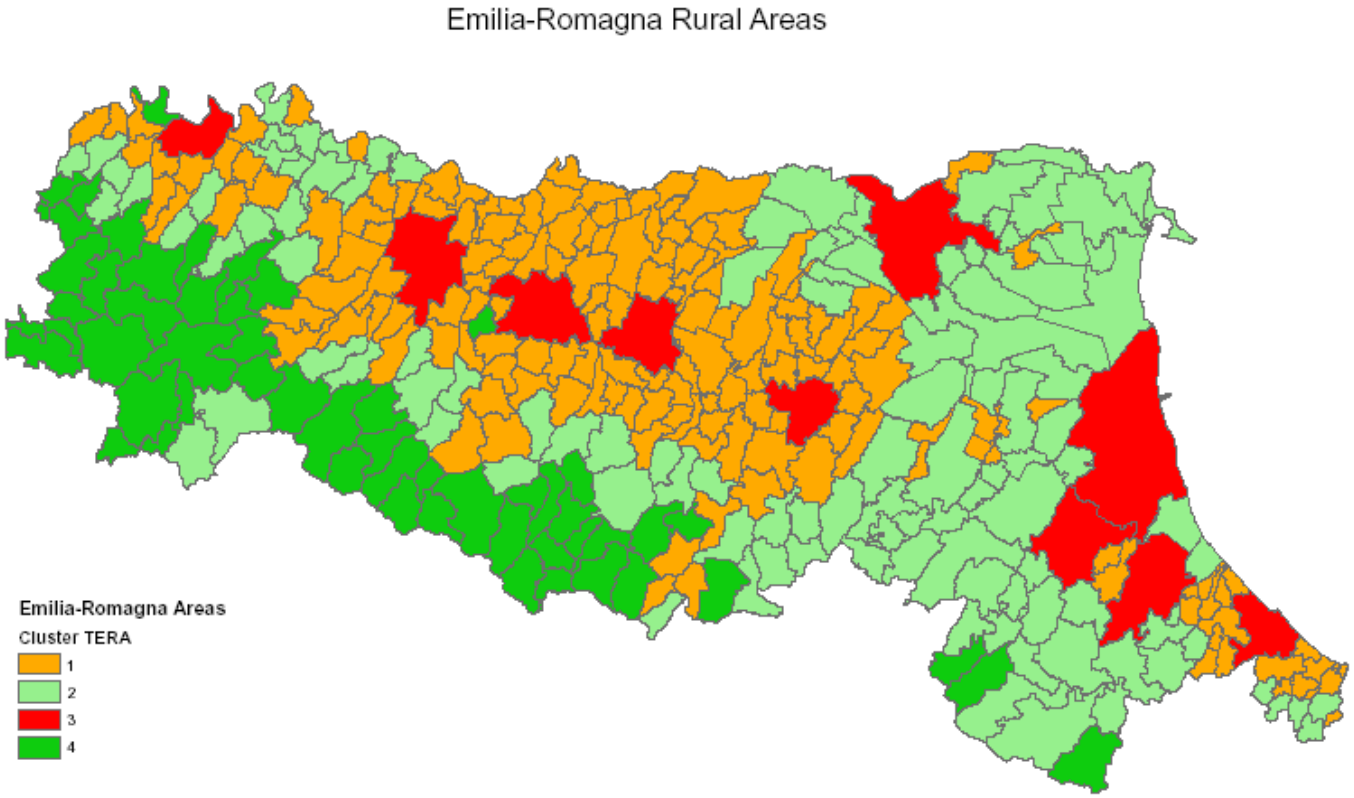
As for the population, the dynamic variation, between the census held in the 1991 and 2001 (according to the ANCITEL database of the year 2005), shows that most of the municipalities in the Province of Ferrara has been affected by a depopulation process with the highest value in the Municipality of Berra (-11.8%), versus a regional value of +1.9%.

Finally, considering the relative distribution of the Municipalities in each Province, as reported in table 5, it is very clear the relative remote rurality of the Po Plain Delta Area, especially that of Ferrara. Here the cluster named "rural area" is the largest of the region. In particular, the 85% of the municipalities of this province result in the cluster so called rural area, followed by the Ravenna province with a percentage of 72%. Furthermore, the Ferrara province's area shows a very weak point in term of industrial economic development, yet, only the 12% of the territories presented indicators that lead to be included in the industrial belt (i.e. the Municipalities of Sant'Antonio and that of Mirabello).

To conclude, considering all the above mentioned observations and comments, as well as summary table reported, it can be said that the Municipalities around the area of Ferrara can be considered the RRRA of the Emilia-Romagna Region.

It is interesting to note that both methodologies, the expert spatial analysis based on the SLLs and the cluster analysis, are clearly aligned to identify the Po Plain Delta area as socio-economically weaker one.

**Fig. 15 – Map of the Cluster resulting from the cluster analysis**



## 3) Relative Remote Rural Areas and Current Policy

As anticipated in the introduction, rural area policies at EU level are strongly linked with CAP and Structural Funds.

In Emilia-Romagna, in the former century, the agricultural space became more and more ***rural***, where rurality has to be intended as "***not urban"***. In these areas producers take on other functions and new roles, consisting of managing the territory and the landscape following the Common Agricultural Policy (CAP). This critical European policy focuses on *environment, quality of the products and vitality of the rural world*, adding a few highly innovative goals to the traditional objectives and modifying its role of the 1960s when agriculture was considered in a mono-function dimension of commodities production for the consumers and of income creation for the producers.

Referring to DATAR[4] (Lacour *et al*., 2003), the French agency for territorial development, the main policy making principles in territorial economic development can be summarized in five leading principles, namely:

1) Redistribution,
2) Refunding or repairing,
3) Protection,
4) Compensation
5) Creation.

All these are the fundamental and the permanent basis that are always used in the territorial policies, even if they are applied with a different intensity and order, according to needs, political and historical phases.

The first, the principle of *redistribution,* is based on the fact that in a point in time a given stock of wealth, job places, and credits exists and it can and must be distributed and localized. In this framework, the goal of territorial planning is to ensure a better or harmonious distribution of these factors. This concept implies a wide vision and the ability to easily ensure the distribution of wealth and it clearly refers to a situation where the State and a top-down planning have a strong role.

The second, the principle of *refunding (or repairing)*, is a planning approach dominated by the sense of construct (or better re-construct) the territorial structure. Differences and unbalances often happen and they cannot be referred to wrong policies or to inefficient behaviors, but rather to negative situations which produce damages to territories and economies both at national and local scale. Therefore, the goal is to provide remedies to these weaknesses in the name of a shared justice.

The third, the principle of *protection,* focuses on the environmental dimension in its meaning of richness, i.e. in the sense of the patrimony of landscape and culture. Always more and more with a wider consensus, this principle is based on the belief that it would be a collective damage if some specific territories would be objects of threats and environmental losses or weakening. The creation of protected areas, national or regional parks, express the sensitivity towards these issues.

The fourth, the principle of *compensation,* is based on the critique that territorial planning is far from being an exact science and that no mathematical, economic or geographical models are able to reach an optimal distribution of means and resources. Even if a wide terminology has been developed (for instance: balanced development,

[4] *Délégation à l'Aménagement du Territoire et à l'Action Régionale*

territorial order, territorial harmonization and so on, all words that seem to proof the contrary), development actions are actually activated in privileged areas, such as places with a high concentration of territorial factors.

Finally, the fifth principle - *creation* - is the most debated in the scientific literature. It is related to the belief that some mechanisms, local conditions and places, can trigger growth and development processes. Mechanisms conceived in such a framework are planned nearly *ex nihilo* since the territory is thought of as a space where planning action can be started-up and trigger exogenous dynamics from which autopoietic and endogenous processes can follow to ensure – in a more or less intense way – a spontaneous and a long term development of the given area.

In this theoretical framework, the Emilia-Romagna Region territorial policy has given to its territories different functions. In particular, in the mountainous areas, given their environmental and morphological characteristics, the regional policies foresee a conservation strategy in order to protect an inestimable patrimony for the eco-social equilibrium of the territory. Development projects which imply a different land use are, instead, indicated in the plain area, where the territory is more suitable for infrastructural action thanks to a higher potential in interconnectivity among areas.

The Po Plain Delta Area, in particular the Municipalities around Ferrara, which results as the potential important target of the regional policy where in the past the an inadequate top-down industrialisation has shown clear limits for a sustainable economic development and now the area calls for a new approach, probably valuing more the interaction of the environmental resources and services.

## 4) Concluding remarks

The analytical description, performed in the whole Emilia-Romagna regional area using the qualitative and quantitative approach, led to identify weak areas in term of selected territorial factors. After the spatial analysis of available data at SLLs level, the assessment of the Emilia-Romagna territorial policies facing enterprises development, the selection process led us to focus the attention on the Po Plain Delta area, especially those SLLs and municipalities which mainly belong to the Province of Ferrara.

Further refining of the assessment of the selection, in order to chose a collection of areas linked to a NUTS3 level, done through the cluster analysis at NUTS5 level, the choice has been restricted to the weaker and more rural and remote municipalities of the area of the province of Ferrara as this show the highest percentage of areas in the rural cluster of the region.

However, the study and the comparative work done within the TERA research project with other selected European remote rural area, highlights that the rural remotes character in this area is not absolute. For instance, these municipalities, compared to remote rural areas in the new EU25 countries can benefit of a relative positive transport infrastructure or a potential space for improvement. In addition, this area is relative close to the capital of the region, to an important international transport ways such as the Brennero motorway and railway, and to a crucial hub as well, like the goods storage and carriage organizations (“interporto”) in Verona.

These and the territorial identification analysis led the authors to introduce the concept of Relative Remote Rural Area which partially could recall the semi-periphery in the theoretical scheme of Immanuel Wallestrein or the trasition area of Friedmann

In addition, this area includes also a main urban centres (also NUTS3 region capital): Ferrara which in this study is clustered in the “Metropolitan Area” category. Economic

interactions between remote rural areas contiguous or adjacent to urban centres, led to conceive Ferrara to be thought as a "relative cores" and recalls the structure of the core-periphery model of the NEG approach (Krugman, 1991; Krugman, 1995). Ferrara is one of the cardinal element to connect more remote rural areas to the rest of the Region or to external territories, not only thanks to infrastructure resources, but also for immaterial resources such as the higher presence of knowledge-based human capital, due to the presence of universities and to a long historical cultural tradition (the Estense tradition come from Ferrara) and social capital. This latter is composed, for instance, by the tradition and ability to manage large enterprises, to start-up and to develop small firms and to work collectively through a well developed cooperative system. In addition, and as far as the naturalistic patrimony is concerned, some of the most precious and rare wetlands ecosystems that can count of an exceptional biodiversity especially in terms of local and migratory ornithological presence are located in the Po Delta plain area. Since more than 20 year a Regional Natural Park has been created in order to protect unique eco-systems in the area of Comacchio, Mesola, Ravenna and Cervia and to provide the conservation and the growth of vegetation and fauna as well as being a source of economic activities (i.e. eco-tourism).

The main goal of the research was to select the RRAs and understand those features that can support to policy decision makers at the Emilia-Romagna regional level. In addition, a second aim of the study was to verify the applicability of a more general methodological approach to be used in other European areas thus the cited TERA methodology. In this contest two more points resulted useful: firstly, the concept of "relativeness" in rural remote area definition is a significant complement to ensure a wider applicability of the methodology in developed areas. Secondly, the resulting area, the Municipalities of the Ferrara Province, shows a particularly rich naturalistic and cultural patrimony and fairly good connection with other territories, therefore can be a development policy making model for other similar rural areas.

To conclude, further lines of research could be done. One can be the refinement of the work applying this approach to other Italian regions, thus to wider validate the methodology using either SLL or cluster analysis. A factor analysis could be applied too, whilst a more refined cluster analysis, for instance a eight-cluster one, did not show any value added. Moreover, a stronger conceptualization of relative remoteness and rurality can be done linking both with New and Classical Economic Geography approaches.

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European Parliament fact sheets: a summary of Community policy and institutions
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Eurostat: European statistics

# Annex I – Indicators for the Local Work System (SLL)

**Table 3 – Selected indicators used in the Local Work System (SLL) expert spatial analysis (Source: ISTAT, 2005)**

| SLL code | Name | N. of Municipalities | Distance from the higher NUTS Location (Km) | Density of the Population | Local Unit | Unemployment rate | % Employed in Agriculture | % Employed in Industry (Manifacturing) | % Employed in other activities (Total) | % of the resident population daily commuting out of the Municipality of home | Empty houses | % of the Empty houses over total houses available | Dependency Index | Seniority Index | % or Elderly Population |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 193 | BOBBIO | 10 | 45 | 15,25 | 849 | 3,27 | 9,47 | 14,92 | 61,59 | 9,49 | 7519 | 60,26771 | 94,71 | 606,52 | 41,76 |
| 194 | FIORENZUOLA D'ARDA | 13 | 29 | 80,66 | 5.027 | 3,11 | 10,43 | 26,54 | 52,25 | 22,68 | 5316 | 19,16712 | 55,09 | 210,02 | 24,06 |
| 195 | PIACENZA | 26 | 0 | 148,88 | 19.474 | 3,50 | 5,05 | 24,94 | 60,40 | 18,56 | 14943 | 15,22078 | 52,46 | 209,43 | 23,29 |
| 196 | BEDONIA | 3 | 79 | 22,64 | 653 | 3,85 | 7,04 | 31,52 | 48,52 | 15,13 | 2895 | 49,5041 | 63,39 | 335,7 | 29,89 |
| 197 | BORGO VAL DI TARO | 4 | 75 | 27,16 | 1.217 | 3,02 | 6,89 | 24,67 | 57,35 | 15,47 | 3713 | 38,97344 | 65,53 | 320,09 | 30,17 |
| 198 | FIDENZA | 10 | 32 | 134,43 | 7.987 | 2,86 | 7,01 | 28,00 | 54,56 | 21,67 | 4780 | 12,60017 | 54,36 | 205,79 | 23,7 |
| 199 | LANGHIRANO | 7 | 25 | 37,81 | 2.505 | 2,62 | 9,34 | 34,83 | 44,68 | 20,26 | 7041 | 39,84945 | 60,22 | 250,94 | 26,88 |
| 200 | PARMA | 24 | 0 | 179,10 | 29.201 | 2,98 | 3,94 | 30,59 | 56,98 | 15,20 | 12968 | 9,70056 | 49,75 | 193,31 | 21,9 |
| 201 | CASTELNOVO NE'MONTI | 8 | 42 | 45,25 | 2.524 | 2,67 | 10,02 | 24,39 | 52,31 | 16,39 | 8201 | 42,95516 | 62,49 | 236,99 | 27,04 |
| 202 | GUASTALLA | 8 | 29 | 221,85 | 5.494 | 2,54 | 5,55 | 46,29 | 39,83 | 22,94 | 1716 | 7,005797 | 50,93 | 178,54 | 21,63 |
| 203 | REGGIO NELL'EMILIA | 19 | 0 | 328,90 | 30.943 | 3,01 | 4,40 | 33,50 | 52,08 | 18,14 | 9034 | 7,318832 | 49,91 | 154,54 | 20,21 |
| 204 | VILLA MINOZZO | 3 | 69 | 27,87 | 826 | 3,14 | 7,29 | 33,10 | 45,55 | 14,31 | 4616 | 53,4383 | 73,54 | 342,98 | 32,81 |
| 205 | CARPI | 6 | 23 | 328,64 | 12.977 | 3,09 | 4,81 | 46,73 | 41,02 | 17,38 | 2783 | 5,705324 | 47,88 | 161,98 | 20,02 |
| 206 | FANANO | 3 | 68 | 37,52 | 939 | 4,63 | 8,68 | 22,88 | 53,62 | 12,66 | 6267 | 67,16322 | 62,85 | 292,83 | 28,77 |
| 207 | MIRANDOLA | 10 | 35 | 148,44 | 8.944 | 3,09 | 7,41 | 42,03 | 41,24 | 21,30 | 3168 | 7,827827 | 52,64 | 195,77 | 22,83 |
| 208 | MODENA | 14 | 0 | 475,82 | 32.462 | 3,35 | 3,56 | 31,91 | 57,02 | 17,47 | 12562 | 9,046326 | 48,82 | 171,94 | 20,74 |
| 209 | PAVULLO NEL FRIGNANO | 4 | 45 | 75,77 | 2.706 | 3,31 | 8,47 | 34,06 | 47,03 | 15,48 | 6557 | 36,32687 | 57,03 | 176,34 | 23,18 |
| 210 | PIEVEPELAGO | 4 | 81 | 25,66 | 750 | 7,18 | 6,56 | 23,57 | 54,89 | 11,54 | 6964 | 76,53588 | 66,46 | 277,92 | 29,36 |
| 211 | SASSUOLO | 11 | 19 | 263,52 | 14.932 | 2,84 | 3,22 | 49,06 | 39,64 | 26,79 | 6354 | 10,05889 | 44,3 | 112,09 | 16,23 |
| 212 | ZOCCA | 4 | 53 | 54,60 | 1.375 | 3,35 | 11,15 | 28,93 | 47,60 | 20,50 | 7337 | 54,7619 | 60,37 | 224,06 | 26,03 |
| 213 | BOLOGNA | 32 | 0 | 353,43 | 80.748 | 3,13 | 2,64 | 24,86 | 66,00 | 20,67 | 22560 | 6,45464 | 50,84 | 221,39 | 23,22 |
| 214 | GAGGIO MONTANO | 10 | 65 | 57,41 | 3.215 | 3,31 | 3,17 | 35,09 | 52,06 | 27,90 | 14516 | 46,48541 | 53,91 | 194,44 | 23,13 |
| 215 | IMOLA | 8 | 48 | 180,81 | 7.587 | 2,75 | 8,18 | 30,48 | 53,35 | 18,07 | 3300 | 8,52559 | 52,57 | 181,05 | 22,2 |
| 216 | ARGENTA | 3 | 34 | 83,62 | 3.937 | 3,78 | 13,97 | 28,81 | 48,05 | 21,13 | 1833 | 8,681855 | 55,23 | 276,71 | 26,14 |
| 217 | CENTO | 7 | 45 | 229,09 | 6.431 | 3,46 | 5,47 | 39,45 | 47,21 | 25,38 | 1897 | 6,527873 | 48,48 | 177,08 | 20,87 |
| 218 | COMACCHIO | 7 | 52 | 70,14 | 5.674 | 7,14 | 14,29 | 22,46 | 49,46 | 17,51 | 29319 | 57,30284 | 46,42 | 223,09 | 21,89 |
| 219 | COPPARO | 6 | 21 | 92,05 | 2.609 | 4,43 | 13,17 | 31,62 | 46,73 | 22,27 | 1781 | 10,0559 | 51,76 | 303,85 | 25,66 |
| 220 | FERRARA | 10 | 0 | 238,60 | 16.069 | 4,03 | 6,78 | 21,63 | 63,95 | 13,84 | 5972 | 7,37466 | 51,22 | 281,3 | 24,99 |
| 221 | MESOLA | 2 | 82 | 99,99 | 1.650 | 5,98 | 34,48 | 21,32 | 34,48 | 14,19 | 326 | 6,658497 | 46,4 | 243,72 | 22,47 |
| 222 | FAENZA | 6 | 47 | 136,80 | 7.513 | 3,07 | 15,10 | 25,66 | 52,22 | 14,72 | 2740 | 7,657481 | 55,07 | 213,79 | 24,2 |
| 223 | LUGO | 9 | 29 | 198,19 | 8.782 | 3,23 | 13,07 | 29,18 | 49,81 | 21,43 | 2502 | 6,054593 | 56,53 | 264,33 | 26,2 |
| 224 | RAVENNA | 3 | 0 | 218,93 | 18.253 | 4,69 | 6,88 | 17,96 | 64,49 | 7,84 | 31401 | 30,14573 | 48,63 | 211,1 | 22,2 |
| 225 | BAGNO DI ROMAGNA | 2 | 67 | 23,17 | 906 | 3,15 | 9,44 | 21,51 | 55,69 | 13,13 | 2076 | 39,70926 | 56,62 | 217,85 | 24,78 |
| 226 | CESENA | 6 | 20 | 177,66 | 11.761 | 3,36 | 14,76 | 20,98 | 55,23 | 13,45 | 5543 | 11,04381 | 47,72 | 177,52 | 20,66 |
| 227 | CESENATICO | 9 | 39 | 459,92 | 10.588 | 4,88 | 11,27 | 23,85 | 54,32 | 23,96 | 12918 | 28,46378 | 44,42 | 129,72 | 17,37 |
| 228 | FORLI' | 5 | 0 | 305,87 | 15.219 | 3,30 | 6,37 | 25,84 | 59,02 | 11,29 | 4256 | 6,862634 | 51,18 | 215,18 | 23,11 |
| 229 | MODIGLIANA | 2 | 37 | 37,06 | 507 | 2,38 | 11,05 | 44,99 | 36,82 | 16,42 | 777 | 23,38952 | 52,12 | 214,98 | 23,38 |
| 230 | ROCCA SAN CASCIANO | 3 | 28 | 30,51 | 432 | 2,35 | 8,70 | 32,51 | 49,70 | 18,48 | 373 | 15,88586 | 63,11 | 235,62 | 27,16 |
| 231 | SANTA SOFIA | 4 | 40 | 26,28 | 970 | 2,72 | 13,54 | 31,29 | 42,77 | 18,04 | 1458 | 23,96056 | 60,48 | 233,2 | 26,38 |
| 232 | CATTOLICA | 12 | 23 | 292,76 | 7.742 | 6,55 | 3,75 | 27,19 | 58,16 | 26,39 | 7694 | 24,54461 | 47,72 | 153,9 | 19,58 |
| 233 | RIMINI | 8 | 0 | 629,38 | 25.514 | 6,05 | 3,35 | 18,88 | 68,94 | 13,35 | 14520 | 15,09638 | 46,66 | 151,15 | 19,15 |

## Annex II – Cluster Analysis at NUTS 5 level

**Table 4 - List of the Municipality (NUTS 5) resulting in each cluster.**

| CLUSTER 1<br>Industrial Belt | CLUSTER 2<br>Rural Areas | CLUSTER 3<br>Metropolitan line | CLUSTER 4<br>Mountain Rural Area |
|---|---|---|---|
| Cadeo | Agazzano | Piacenza | Bettola |
| Calendasco | Alseno | Parma | Bobbio |
| Caorso | Besenzone | Reggio nell'Emilia | Caminata |
| Carpaneto Piacentino | Borgonovo Val Tidone | Modena | Cerignale |
| Castel San Giovanni | Castell'Arquato | Bologna | Coli |
| Castelvetro Piacenti | Cortemaggiore | Ferrara | Corte Brugnatella |
| Fiorenzuola d'Arda | Gazzola | Ravenna | Farini |
| Gossolengo | Lugagnano Val d'Arda | Cesena | Ferriere |
| Gragnano Trebbiense | Monticelli d'Ongina | Forlì | Gropparello |
| Podenzano | Piozzano | Rimini | Morfasso |
| Pontenure | Ponte dell'Olio | | Nibbiano |
| Rivergaro | San Giorgio Piacenti | | Ottone |
| Rottofreno | San Pietro in Cerro | | Pecorara |
| Sarmato | Villanova sull'Arda | | Pianello Val Tidone |
| Vigolzone | Ziano Piacentino | | Travo |
| Collecchio | Albareto | | Vernasca |
| Colorno | Borgo Val di Taro | | Zerba |
| Felino | Busseto | | Bardi |
| Fidenza | Calestano | | Bedonia |
| Fontanellato | Lesignano de' Bagni | | Berceto |
| Fontevivo | Neviano degli Arduin | | Bore |
| Fornovo di Taro | Polesine Parmense | | Compiano |
| Langhirano | Roccabianca | | Corniglio |
| Medesano | Salsomaggiore Terme | | Monchio delle Corti |
| Mezzani | Sissa | | Palanzano |
| Montechiarugolo | Soragna | | Pellegrino Parmense |
| Noceto | Terenzo | | Tizzano Val Parma |
| Sala Baganza | Baiso | | Tornolo |
| San Secondo Parmense | Canossa | | Valmozzola |
| Solignano | Toano | | Varsi |
| Sorbolo | Vetto | | Busana |
| Torrile | Finale Emilia | | Collagna |
| Traversetolo | Guiglia | | Ligonchio |
| Trecasali | Pavullo nel Frignano | | Ramiseto |
| Varano de' Melegari | Prignano sulla Secch | | Villa Minozzo |
| Zibello | Serramazzoni | | Fanano |
| Albinea | Zocca | | Fiumalbo |
| Bagnolo in Piano | Borgo Tossignano | | Frassinoro |
| Bibbiano | Casalfiumanese | | Lama Mocogno |
| Boretto | Castel del Rio | | Montecreto |
| Brescello | Castel San Pietro Te | | Montefiorino |
| Cadelbosco di Sopra | Castiglione dei Pepo | | Montese |
| Campagnola Emilia | Crevalcore | | Palagano |
| Campegine | Fontanelice | | Pievepelago |
| Carpineti | Galliera | | Polinago |

| CLUSTER 1<br>Industrial Belt | CLUSTER 2<br>Rural Areas | CLUSTER 3<br>Metropolitan line | CLUSTER 4<br>Mountain Rural Area |
|---|---|---|---|
| Casalgrande | Granaglione | | Riolunato |
| Casina | Grizzana Morandi | | Sestola |
| Castellarano | Imola | | Camugnano |
| Castelnovo di Sotto | Loiano | | Castel d'Aiano |
| Castelnovo ne' Monti | Medicina | | Lizzano in Belvedere |
| Cavriago | Molinella | | Portico e San Benede |
| Correggio | Monghidoro | | Premilcuore |
| Fabbrico | Monterenzio | | Verghereto |
| Gattatico | Monzuno | | |
| Gualtieri | San Benedetto Val di | | |
| Guastalla | San Pietro in Casale | | |
| Luzzara | Savigno | | |
| Montecchio Emilia | Argenta | | |
| Novellara | Berra | | |
| Poviglio | Bondeno | | |
| Quattro Castella | Codigoro | | |
| Reggiolo | Comacchio | | |
| Rio Saliceto | Copparo | | |
| Rolo | Formignana | | |
| Rubiera | Goro | | |
| San Martino in Rio | Jolanda di Savoia | | |
| San Polo d'Enza | Lagosanto | | |
| Sant'Ilario d'Enza | Masi Torello | | |
| Scandiano | Massa Fiscaglia | | |
| Vezzano sul Crostolo | Mesola | | |
| Viano | Migliarino | | |
| Bastiglia | Migliaro | | |
| Bomporto | Ostellato | | |
| Campogalliano | Poggio Renatico | | |
| Camposanto | Portomaggiore | | |
| Carpi | Ro | | |
| Castelfranco Emilia | Tresigallo | | |
| Castelnuovo Rangone | Vigarano Mainarda | | |
| Castelvetro di Moden | Voghiera | | |
| Cavezzo | Alfonsine | | |
| Concordia sulla Secc | Bagnacavallo | | |
| Fiorano Modenese | Brisighella | | |
| Formigine | Casola Valsenio | | |
| Maranello | Castel Bolognese | | |
| Marano sul Panaro | Cervia | | |
| Medolla | Conselice | | |
| Mirandola | Cotignola | | |
| Nonantola | Faenza | | |
| Novi di Modena | Lugo | | |
| Ravarino | Riolo Terme | | |
| San Cesario sul Pana | Russi | | |
| San Felice sul Panar | Solarolo | | |
| San Possidonio | Bagno di Romagna | | |
| San Prospero | Borghi | | |
| | | | |

| CLUSTER 1<br>Industrial Belt | CLUSTER 2<br>Rural Areas | CLUSTER 3<br>Metropolitan line | CLUSTER 4<br>Mountain Rural Area |
|---|---|---|---|
| Savignano sul Panaro | Cesenatico | | |
| Soliera | Civitella di Romagna | | |
| Spilamberto | Dovadola | | |
| Vignola | Galeata | | |
| Anzola dell'Emilia | Meldola | | |
| Argelato | Mercato Saraceno | | |
| Baricella | Modigliana | | |
| Bazzano | Montiano | | |
| Bentivoglio | Predappio | | |
| Budrio | Rocca San Casciano | | |
| Calderara di Reno | Roncofreddo | | |
| Casalecchio di Reno | Santa Sofia | | |
| Castel di Casio | Sarsina | | |
| Castel Guelfo di Bol | Sogliano al Rubicone | | |
| Castello d'Argile | Tredozio | | |
| Castello di Serraval | Gemmano | | |
| Castel Maggiore | Mondaino | | |
| Castenaso | Montefiore Conca | | |
| Crespellano | Montescudo | | |
| Dozza | Saludecio | | |
| Gaggio Montano | | | |
| Granarolo dell'Emili | | | |
| Malalbergo | | | |
| Marzabotto | | | |
| Minerbio | | | |
| Monte San Pietro | | | |
| Monteveglio | | | |
| Mordano | | | |
| Ozzano dell'Emilia | | | |
| Pianoro | | | |
| Pieve di Cento | | | |
| Porretta Terme | | | |
| Sala Bolognese | | | |
| San Giorgio di Piano | | | |
| San Giovanni in Pers | | | |
| San Lazzaro di Saven | | | |
| Sant'Agata Bolognese | | | |
| Sasso Marconi | | | |
| Vergato | | | |
| Zola Predosa | | | |
| Cento | | | |
| Mirabello | | | |
| Sant'Agostino | | | |
| Bagnara di Romagna | | | |
| Fusignano | | | |
| Massa Lombarda | | | |
| Sant'Agata sul Sante | | | |
| Bertinoro | | | |
| Forlimpopoli | | | |

| **CLUSTER 1**<br>**Industrial Belt** | **CLUSTER 2**<br>**Rural Areas** | **CLUSTER 3**<br>**Metropolitan line** | **CLUSTER 4**<br>**Mountain Rural Area** |
|---|---|---|---|
| Gambettola | | | |
| Gatteo | | | |
| Longiano | | | |
| San Mauro Pascoli | | | |
| Savignano sul Rubico | | | |
| Bellaria-Igea Marina | | | |
| Cattolica | | | |
| Coriano | | | |
| Misano Adriatico | | | |
| Monte Colombo | | | |
| Montegridolfo | | | |
| Morciano di Romagna | | | |
| Poggio Berni | | | |
| Riccione | | | |
| San Clemente | | | |
| San Giovanni in Mari | | | |
| Santarcangelo di Rom | | | |
| Torriana | | | |
| Verucchio | | | |

**Table 5 – Rurality of Municipalities (NUTS5) in each cluster per Provinces (NUTS3)**

| NUTS 3 | Total n. NUTS 5 in the given NUTS 3 | cluster 1 Industrial Belt | % | cluster 2 Rural Areas | % | cluster 3 Metropolitan Line | % | cluster 4 Mountain Rural Area | % |
|---|---|---|---|---|---|---|---|---|---|
| Piacenza | 48 | 15 | 31% | 15 | 31% | 1 | 2% | 17 | 35% |
| Parma | 47 | 21 | 45% | 12 | 26% | 1 | 2% | 13 | 28% |
| Reggio Emilia | 45 | 35 | 78% | 4 | 9% | 1 | 2% | 5 | 11% |
| Modena | 47 | 28 | 60% | 6 | 13% | 1 | 2% | 12 | 26% |
| Bologna | 60 | 36 | 60% | 20 | 33% | 1 | 2% | 3 | 5% |
| **Ferrara** | **26** | **3** | **12%** | **22** | **85%** | **1** | **4%** | **0** | **0%** |
| Ravenna | 18 | 4 | 22% | 13 | 72% | 1 | 6% | 0 | 0% |
| Forlì-Cesena | 30 | 7 | 23% | 18 | 60% | 2 | 7% | 3 | 10% |
| Rimini | 20 | 13 | 65% | 6 | 30% | 1 | 5% | 0 | 0% |

**Table 6 – Means of each indicator used for each cluster**

| | | | | | Total Group |
|---|---|---|---|---|---|
| **Indicators** | ***Cluster 1/2*** | ***Cluster 2/4*** | ***Cluster 3/4*** | ***Cluster 4/4*** | ***Mean*** |
| | **Mean** | **Mean** | **Mean** | **Mean** | |
| Total area in $Km^2$ | 41,06 | 75,41 | 274,34 | 78,24 | *64,62* |
| Rural areas in % | 85,72 | 95,15 | 85,37 | 96,56 | *90,56* |
| Utilized agricultural area/total area in $Km^2$ % | 2,29 | 1,18 | 0,23 | 0,79 | *1,62* |
| Total roads in Km/ total municipality area | 29,30 | 1,88 | 2,92 | 2,18 | *15,06* |
| Total population 2001 | 9322,64 | 7127,11 | 157272,60 | 1828,43 | *11756,13* |
| Density of population (ab/kmq) | 285,48 | 95,52 | 797,10 | 26,53 | *196,18* |
| Population balance/inhabitants (times 1000) | 18,77 | 11,72 | 10,69 | -5,63 | *12,36* |
| Per capita disposable income (Euro, 2001) | 16227,85 | 15272,43 | 18360,70 | 16760,87 | *16051,03* |
| Seniority index | 160,20 | 221,14 | 209,64 | 486,20 | *232,87* |
| Dependency index | 49,44 | 55,11 | 51,37 | 79,98 | *56,15* |
| Local Units/inhabitants % | 8,97 | 8,03 | 9,08 | 9,87 | *8,80* |
| Agricultural employment % | 6,21 | 12,65 | 4,53 | 11,25 | *9,12* |
| Industrial employment % | 45,81 | 39,71 | 29,83 | 38,99 | *42,21* |
| Other activities employment % | 48,01 | 47,64 | 65,65 | 49,77 | *48,67* |
| employment/total population % | 47,82 | 44,29 | 42,92 | 35,31 | *44,54* |
| Total employment | 4361,79 | 3104,22 | 67321,10 | 668,74 | *5210,00* |
| Unemployment rate | 3,64 | 4,30 | 4,71 | 4,26 | *3,99* |
| Vacant houses % | 10,56 | 20,50 | 9,65 | 54,67 | *20,74* |
| Families with one component % | 23,41 | 27,49 | 29,26 | 42,82 | *27,97* |
| Families with 6 or more components % | 50,31 | 38,04 | 51,25 | 7,09 | *53,01* |
| Daily commuters (outside the municipality)/total population | 28,63 | 24,29 | 8,01 | 14,65 | *24,39* |
| Daily commuters (towards the municipality)/ total population | 22,14 | 10,45 | 17,39 | 5,27 | *15,44* |